

PHASE I BOOK EXPLOITATION

SOV/3765

Bykov, Vladimir Aleksandrovich

Plastichnost' i prochnost' konstruktsionnoy stali (Plasticity and Strength of Constructional Steel) Leningrad, Sudpromgiz, 1959. 198 p. 3,000 copies printed.

Scientific Ed.: P.O. Pashkov; Ed.: M.A. Aptekman; Tech. Ed.: L.M. Shishkova.

PURPOSE: The book is intended for scientific research workers, process engineers, designers, and may also be used by students at schools of higher technical education.

COVERAGE: The problems discussed concern primarily the strength, plasticity and ductility of steel parts in relation to the state of stress under loading. Some chapters deal with plastic, brittle and fatigue strength as indicated by overstrain signs, such as yield, cleavage, and formation of cracks due to alternating stresses. Practical examples are cited to illustrate the cases of limiting

~~Card 1/6~~

Plasticity and Strength (Cont.)

SOV/3765

strength of steel parts. Other chapters describe methods of investigating the strength and the ductility of steel necessary in designing parts and in selecting steels that can work in load-carrying parts as a plastic material. There are 80 references: 74 Soviet, 5 English, and 1 French.

TABLE OF CONTENTS:

Foreword	3
Ch. I. Working Conditions of a Loaded Machine Part	5
1. Stresses and strains--parameters of the mechanical state of a loaded machine part	5
2. State of stress in a part at the point under investigation	10
3. Investigating the state of plane stress	17
4. The state of three-dimensional stress	21
5. Characteristics of mechanical properties of steel as determined by tests	28
6. Interaction between elastic and plastic deformations	33
7. External signs of deformation and failure	36

~~Card 2/6~~

25(5), 28(1)

AUTHOR:

~~Dykov, V. A.~~, Engineer,
Leading Specialist of the Gosplan USSR

SOV/119-59-1-6/20

TITLE:

It is Necessary to Provide in Due Time for Experimentation and
Demonstration Centers (Obespechit' svoevremennyy pusk opytno -
pokazatel'nykh predpriyatiy)

PERIODICAL:

Priborostroyeniye, 1959, Nr 1, pp 7-7 (USSR)

ABSTRACT:

On account of the decisions of the 21st Party Congress a
transition from partial automation to overall mechanization and
automation of technological processes has been planned. In order
to be able to render this transition more effective it has to be
accompanied by a considerable intensification of work, a reduction
of the cost of production, and an improvement with respect to the
quality of the output. The taking up of production of the 50
experimentation and demonstration centers which are equipped
with the latest assembly lines for overall mechanization and
automation will be a long step towards success. With the
complete mechanization and automation of the Magnitogorskiy
metallurgicheskiy kombinat (Magnitogorsk Metallurgical Kombinat)
the output of the mentioned kombinat will increase by 60%

Card 1/2

It is Necessary to Provide in Due Time for
Experimentation and Demonstration Centers

SOV/119-59-1-6/20

in 1958 as compared to 1965. The output of metal achieved by the factories working at present amounts to 300,000 t cast iron, 400,000 t steel, and 250,000 t rolled stock. An amortization of the capital spent on the overall mechanization will not take longer than two years. A further task is to increase the number of scientific research institutes and special construction bureaus for problems of automation and to subject the individual tasks to a strict coordination and to entrust the institutes with special tasks.

ASSOCIATION: Gosplan SSSR (Gosplan USSR)

Card 2/2

SOV/135-59-6-7/20

18(7)

AUTHOR:

Kokh, B. A., Yungel'son B. G., and Vsevolodov, G. N.,
Engineers and Bykov, V. A., Candidate of Technical
Sciences

TITLE:

Fatigue Strength of the 08 G D N F L - Cast-Steel
Electro-slag Welds

PERIODICAL: Svarochnoye Proizvodstvo, 1959, Nr 6, pp 24-26 (USSR)

ABSTRACT:

08 G D N F L - steel is broadly applied in shipbuilding
for large welded parts which are working under dynamic
charge. Some of them are joined by electro-slag welds.
The authors give the results of the investigations of
the strength fatigue of electro-slag welded joints for
this kind of steel. The investigation has been carried
out on industrial steel constructed as follows: 0.05%
C, 0.15% Si, 0.59% Mn, 1.18% Ni, 0.85% Cu. Reference 1
gives the chemical breakdown of 08 G D N F L - steel.
The welding was done by an automatic welding torch A-
372 M /Ref 2/. Figure 1 demonstrates the micro-struc-
ture of the base metal and weld metal formed by Cv-10

Card 1/2

SOV/135-59-6-7/20

Fatigue Strength of the 08 G D N F L - Cast-Steel Electro-slag Welds

G2 wire. Figure 2 shows the structure temper near the welding zone of the base metal and weld metal. The measurements of the models for investigation of fatigue strength are shown in Figure 3. The skirting of the models has been tested on machines constructed in the "Ship-Building Institute" in Leningrad, [Ref 3]. The article states that the strength fatigue of 08 G D N F L cast-steel at electro-slag welds is not worse than that of other metals. The lack of thermal treatment after welding is not disadvantageous for the fatigue strength of electro-slag weld joints. There are 5 diagrams and 5 Soviet references.

ASSOCIATION: Leningradskiy korablestroitel'nyy institut (Leningrad Shipbuilding Institute) (Vsevolodov, G.N. and Bykov, V.A.)
TsNIITS (Kokh, B.A. and Yungel'son, B.G.)

Card 2/2

BYKOV, V.A.; GEL'FENBEYN, Ye.Yu.; PILIP, M.M.

New design of rope transfer and racking arrangements.

Prokat. proizv. no.2:111-117 '60. (MIRA 14:11)

(Rolling mills--Equipment and supplies)

KORYAKIN, K.V.; BYKOV, V.A.

Rail and girder 950/800 mill. Prokat. proizv. no.2:126-138
'60. (MIRA 14:11)

(Rolling mills)

BEKOV, V.A. (Sverdlovsk); VOLKOV, S.D. (Sverdlovsk); KLINSKIKH, N.A.
(Sverdlovsk)

Distribution of the elasticity constants in hexagonal
polycrystals. PMTF no.4:69-72 N-D '60. (MIRA 14:7)

1. Ural'skiy politekhnicheskiy institut.
(Metal crystals)
(Elasticity)

SEMENKO, Yuriy Lukich; KOROLEV, A.A., kand. tekhn. nauk, retsenzent; ~~BYKOV, V.A., inzh., retsenzent~~; SMIRNOV, V.V., kand. tekhn. nauk, dots., red.; GOLYATKINA, A.G., red. izd-va; KLEYNMAN, M.R., tekhn. red.

[Machines for the straightening of rolled products] Mashiny dlia pravki prokata. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po cherno i tsvetnoi metallurgii, 1961. 207 p. (MIRA 14:11)
(Rolling mills—Equipment and supplies)

BYKOV, V.A.

Better ways to make use of the plasticity and strength of steel
in constructions. Trudy LKI no.34:23-28 '61. (MIRA 15:8)

1. Kafedra soprotivleniya materialov Leningradskogo
korablestroitel'nogo instituta.
(Hulls (Naval architecture)) (Strains and stresses)

BYKOV, V.A.

54R
45

PHASE I BOOK EXPLOITATION

SOV/6025

Soveshechaniye po ustalosti metallov. 2nd., Moscow, 1950.

Tsiklicheskaya prochnost' metallov; materialy vtorogo soveshechaniya po ustalosti metallov, 24 - 27 maya 1950 g. (Cyclic Metal Strength; Materials of the Second Conference on the Fatigue of Metals, held May 24 - 27, 1950) Moscow, Izd-vo AN SSSR, 1952. 338 p. Errata slip inserted. 2800 copies printed.

Resp. Ed.: I. A. Odintsov, Corresponding Member of the Academy of Sciences of the USSR; Ed. of Publishing House: A. N. Chernov; Tech. Ed.: A. P. Guseva.

PURPOSE: This collection of articles is intended for scientific research workers and metallurgists.

COVERAGE: The collection contains papers presented and discussed at the second conference on fatigue of metals, which was held at the Institute of Metallurgy in May 1950. These papers deal with the nature of fatigue fracture, the mechanism of formation

Card 1/1

45

Cyclic Metal Strength (Cont.).

SOV/6025

and growth of fatigue cracks, the role of plastic deformation in fatigue fracture, an accelerated method of determining fatigue strength, the plotting of fatigue diagrams, and various fatigue test methods. New data are presented on the sensitivity of high-strength steel to stress concentration, the effect of stress concentration on the criterion of fatigue failure, the effect of the size factor on the strength of metal under cyclic loads, and results of endurance tests of various machine parts. Problems connected with cyclic metal toughness, internal friction, and the effect of corrosion media and temperature on the fatigue strength of metals are also discussed. No personalities are mentioned. Each article is accompanied by references, mostly Soviet.

TABLE OF CONTENTS:

NATURE OF FATIGUE FRACTURE

Oding, I. A. Diffusionless Mechanism of Formation and Growth of a Fatigue Crack
Card 2/2

3

2

Cyclic Metal Strength (Cont.)

SOV/6025

Postnikov, V. S., I. V. Zolotukhin, and G. A. Gorshkov.
Investigation of Mechanical and Thermal Fatigue of Metals
by the Method of Internal Friction

218

Pochtennyy, Ye. K. Heat Effect in Cyclic Symmetric Loading
of Parts

227

EFFECT OF ENVIRONMENT
ON THE FATIGUE STRENGTH

Karpenko, T. V. Basic Factors in the Investigation of the
Effect of Environment on Fatigue Strength

233

Bykov, V. A., and G. N. Vsevolodov. Corrosion-Fatigue
Strength of Cast Brass

238

Chayevskiy, M. I. Effect of Melts of Low-Melting
Metals on the Fatigue Strength of Carbon and Chromium-
Nickel Steels

243

Card 7/9

ACCESSION NR: AT4014047

S/3073/63/000/000/0099/0110

AUTHOR: Bykov, V. A.; Vsevolodv, G. N.

TITLE: Endurance and plasticity of metals

SOURCE: Prochnost' metallov pri peremennykh nagruzkakh; materialy tret'yego soveshchaniya po ustalosti metallov, 1962 g. Moscow, Izd-vo AN SSSR, 1963, 99-110

TOPIC TAGS: Endurance, plasticity, metal endurance, metal plasticity, cracking, stress, plastic deformation, elastic deformation, fatigue

ABSTRACT: Plastic deformation, the initiation of a local rupture or crack, the deepening of a crack, and fracture are frequently used as indications of an ultimate state of resistance. In this connection, one must account for influences caused by rearrangement of stresses when a transition from an elastic to a plastic range of deformations occurs. In practical cases repeated loading conditions are usually present. In some cases the ultimate state is attained by a single unfavorable loading; in other cases the damage leading to the

Card 1/3

ACCESSION NR: AT4014047

ultimate state has been accumulated as the result of the cyclic character of stresses. Fatigue crack propagation, fatigue strength at elastic and plastic deformations of smooth and notched test specimens, the influence of residual stresses at plastic deformations, and fatigue strength of wide strips bent as plates are discussed in some detail. It is concluded that: (1) the influence of factors decreasing the fatigue strength is moderated by conditions encountered in the plastic range; (2) the fatigue cracks are propagated with less intensity on larger test specimens or machine parts; however, the smaller specimens or parts endure a higher stress before the formation of cracks occurs. The period of crack propagation in the plastic range is relatively long; (3) at plastic zero-to-compression cycling of specimens containing stress raisers, actual stresses change sign because of residual tensile stresses; (4) at a reduction of fatigue life to 1/4 of a cycle, the ultimate cyclic stress obtained by extrapolation is close to the true stress in the contracted zone at failure in tension; (5) after bending in the plastic range, residual stresses have no negative effect on fatigue strength; (6) wide strips bent cyclically in the elastic range exhibit fatigue cracking at the edges; in the plastic range, however, fatigue cracks occur first in the central portion of the width; (7) at plane stress conditions, such as occur during bending of wide strips, and

Cord 2/3

ACCESSION NR: AT4014047

at uniaxial stress conditions such as occur during bending of narrow strips, fatigue strength can be generalized by the stress. "The author expresses thanks to T. E. Mingin, B. B. Chegulin, and Yu. S. Chuvikovskiy, who made possible the research, the results of which are reported in the present article." Orig. art. has: 20 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 20Feb64

ENCL: 00

SUB CODE: MM

NO REF SOV: 008

OTHER: 004

Card 3/3

S/032/62/028/006/018/025
B108/B104

10.8100

AUTHORS: Bykov, V. A., Vlas'yeva, M. N., and Vsevolodov, G. N.

TITLE: Study of plastic bending equivalent to cold bending of a metal

PERIODICAL: Zavodskaya laboratoriya, v. 28, no. 6, 1962, 723-726

TEXT: The method of testing metals consists in imposing a bending moment on successive sections of a slender specimen. The real plastic deformation stress can then be found from the nominal stress and the mean relative fiber deformation $\lambda_m = (\Delta L_{ext} + \Delta L_{compr})/2L_o$, where $\Delta L_{ext} = L_{extension} - L_o$ and $\Delta L_{compr} = L_o - L_{compression}$. There are 4 figures. /B

ASSOCIATION: Leningradskiy korablestroitel'nyy institut (Leningrad Shipbuilding Institute)

Card 1/1

BYKOV, V.A.; VSEVOLODOV, G.N.; TELUSHKINA, M.P.

Rapid testing of cast brass for corrosion cracking. Zav.lab. 28
no.8:954-956 '62. (MIRA 15:11)

1. Leningradskiy korablestroitel'nyy institut.
(Brass—Corrosion)

L 37681-65 ENT(d)/ENT(v)/ENT(l)/ENT(h)/ENT(l) Pf 8/2917/64/000/270/0115/0125
 ACCESSION NR: AT5008247

AUTHOR: Ovlasyuk, V. Ya.; (Candidate of technical sciences), Bykov, V. A. (Engineer) ²¹ _{B+}

TITLE: Directional electronic total impedance relay having discrete settings with respect to modulus and angle

SOURCE: Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut zheleznodorozhnogo transporta. Trudy, no. 276, 1984. Teleupravleniye i novyye skhemy avtomatiki v elektroyagovykh ustroystvakh (Remote control and new automation systems in electric traction devices), 115-125

TOPIC TAGS: electronic relay, phase angle sensitive relay, total impedance relay, control system, directional relay

ABSTRACT: The authors have developed a directional electronic relay of total impedance having discrete setting with respect to the modulus of the total fictitious impedance and the phase shift angle between the voltage and current. It is earmarked for the protection of feeders of the 27.5 kV AC railway contact network. The previously existing electromechanical or other types of relays could not distinguish reliably between the short circuit currents and load currents and caused a large number of false stoppages (triggered by load currents). Theoretical and experimental tests showed

Card 1/4

L 37681-65

ACCESSION NR: AT5008247

that the argument of the total load impedance is within $35-40^\circ$, the phase of the total impedance of the contact network during short circuits is of the order of 65° , while the phase angle in the presence of a load and a distant short circuit may be found within the limits of $50-55^\circ$. This was sufficient for the design of the electronic relay shown in Fig. 1 of the Enclosure. The article describes the operation of the relay in detail and presents a pulse-length reduction circuit. Orig. art. has: 12 formulas and 6 figures.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut zheleznodorozhnogo transporta, Moscow (All-Union Scientific Research Institute of Railway Transport)

SUBMITTED: 00

ENCL: 02

SUB CODE: IC, IE

NO REF SOV: 002

OTHER: 000

Card 2/4

OVLASYUK, V.Ya., kand. tekhn. nauk; BYKOV, V.A., inzh.; LUTIN, V.B.,
inzh.

System for the blocking of the current reverser of the overhead
contact line section in alternate and direct current converter
stations of electrified railroads. Trudy TSNII MES no.276:149-
151 '64. (MIRA 17:8)

BYKOV, V.A.; VSEVOLODOV, G.N.; KAZIMIROVSKAYA, Z.I.

Determination of the brittle strength of steel in the series
of bend and tensile tests. Zav. lab. 30 no.6:749-750 *64
(MIRA 17:8)

1. Leningradskiy korablestroitel'nyy institut.

GRABOVSKIY, L.K., inzh.; BASHILOV, G.N., inzh.; SOKOLOVSKIY, O.P., inzh.;
KRASNOSEL'SKIKH, S.N., inzh.; ANTONOV, P.A.; BYKOV, V.A., inzh.;
DANILOV, G.G., inzh.; GEL'FENBEYN, Ye.Yu., inzh.; PILIP, M.M.,
inzh.; MAKAROV, B.V., inzh.; RAGINSKIY, D.M., inzh.

Equipment of a working line of hot rolling mills. Sbor. st.
NIITIAZHMASHa Uralmashsavoda no.6:70-96 '65.

(MIRA 18:11)

L 12046-66 EMT(m)/EMP(w)/T/EMP(t)/FTI IJP(c) JD/EM

ACC NR: AR6009966

SOURCE CODE: UR/0137/65/000/012/1056/1057

AUTHOR: Bykov, V. A.; Fedorov, A. S.

TITLE: Cyclic strength of structural alloys with limited life

SOURCE: Ref. zh. Metallurgiya, Abs. 121424

REF SOURCE: Tr. Leningr. korablestroit. in-ta, vyp. 46, 1964, 87-91

TOPIC TAGS: FABRICATED STRUCTURAL METAL, ship plate steel, cyclic strength, fatigue test, material fracture / 3 ship plate steel, SKhL-4 ship plate steel

ABSTRACT: Ship-plate steels 3 and SKhL-4 are investigated. For a life of $<10^4$ cycles for 3 steel and $2 \cdot 10^5$ cycles for the investigated alloy fatigue breakdown sets in the presence of stresses exceeding σ_g . In case of limited life and plastic deformation, stress concentrators in the form of grooves and apertures do not reduce cyclic strength, although fatigue cracks arise in the region of stress concentration. Under these conditions, contact stresses do not adversely affect cyclic strength; smooth specimens fracture outside the clamped area. Plastic-fatigue cracks in specimens appear at an early test stage. The accumulation of fatigue-induced defects in the material is chiefly determined by the patterns of the process of the development of fatigue cracks. Authors' summary. [Translation of abstract]

SUB CODE: 13, 11

Cord 1/1 af

UDC: 669.14.018.291

39
B

L 07184-67 EWT(d)/EWT(m)/EWP(w)/EWP(t)/ETI IJP(c) JD/EM

ACC NR: AR6014355 (A, N) SOURCE CODE: UR/0277/65/000/011/0011/0011

AUTHOR: Bykov, V. A.

TITLE: Ultimate stresses in brittle fracture of plates

SOURCE: Ref. zh. Mashinostroitel'nyye materialy, konstruksii i raschet detaley mashin. Gidroprivod, Abs. 11.48.84

REF SOURCE: Tr. Leningr. korablestroit. in-ta, vyp. 46, 1964, 93-101

TOPIC TAGS: ultimate stress, steel sheet, metal fracture, brittle fracture

ABSTRACT: The conditions contributing to embrittlement of steel were studied. It was established that after qualitatively duplicating brittle steel conditions by repeated bending of wide, flat specimens one can quantitatively determine the tensile strength using data from repeated axial tensile tests under analogous temperature conditions. The actual and calculated values of the ultimate stress in the fracture of wide, flat steel specimens show satisfactory agreement if in the calculations one considers the tensile strength as determined by the proposed method. Bibliography of 5 titles. [Translation of abstract]

SUB CODE: 13.11

Card 1/1

UDC: 669.14.018:539.42

ACC NR: AR7004681

SOURCE CODE: UR/0277/66/000/010/0005/0006

AUTHOR: Bykov, V. A.; Glazov, V. P.

TITLE: Strength of constructional alloys at low-cycle fatigue tests in the presence of stress concentration

SOURCE: Ref. zh. Mashinostroitel'nyye materialy, konstruksii i raschet detaley mashin. Gidroprivod, Abs. 10.48.28

REF SOURCE: Tr. Leningr. korablestroit. in-ta, vyp. 49, 1965, 21-30

TOPIC TAGS: alloy, fatigue strength, constructional alloy, alloy fatigue strength, low cycle fatigue strength

ABSTRACT: The results are given of low-cycle fatigue tests on specimens of two structural alloys subjected to alternating pulsed elongation, bending and torsion with stress concentration as well as of similar test at pulsed pressure conducted on welded containers. The low-cycle fatigue strength tests of the laboratory specimens gave a satisfactory reproduction of the performance of the material under actual construction conditions and the test data obtained may be

Card 1/2

UDC: 669.018:539.434:620.178.3

ACC NR: AR7004681

used to evaluate load carrying capacities and service life of parts from this material. The tested alloys being materials with ductile properties are capable of withstanding without fatigue failure stresses that equal the yield point at a higher number of cycles which permits calculation of low-cycle strength of parts with allowance for plastic deformation. [Translation of abstract] [DW]

SUB CODE: 13/

Card 2/2

BYKOV, V.D.; LYU CHAN-MIN [Liu Ch'ang-ming]

Determining the coefficient variation (Cv) of the annual runoff.

Vest. Mosk. un. Ser. 5: Geog. 18 no.4:71-72 J1-Ag'63.

(MIRA 17:2)

BYKOV, V.D.; GUSEYNOVA, S.I.

Effect of acupuncture on the bioelectric activity of the
brain in practically healthy people. Sbor. trud. GMI no.9:
36-42 '62. (MIRA 17:2)

1. Dotsentskiy kurs igloukalyvaniya (zav. - dotsent M.K.
Usova) i kafedra klinicheskoy i eksperimental'noy fiziologii
(zav. - dotsent Ye.F. Polezhaev) Tsentral'nogo instituta
usovershenstvovaniya vrachey (dir. - M.D. Kovrigina).

BYKOV, V.D.; KONAREVA, M.V.

Study of the functional state of the adrenal cortex during
acupuncture in practically healthy people. Sbor. trud. GMI
no.9:86-89 '62. (MIRA 17:2)

1. Tsentral'nyy institut usovershenstvovaniya vrachey (dir. -
M.D. Kovrigina), dotsentskiy kurs igloukalyvaniya (zav.
kursom dotsent M.K. Usova), kafedra klinicheskoy i eksperi-
mental'noy fiziologii (zav. kafedroy dotsent Polezhayev,
Ye.F.).

BYKOV, V.D., prof.

"Hydrological dictionary" by A.I. Chebotarev. Reviewed by
V.D. Bykov. Meteor. i gidrol. no.3:49-50 Mr '65.
(MIRA 18:2)

TSAREGORODTSE /, T.I., red.; BYKOV, V.D., red.

[Methodological problems of present-day medicine] Metodologicheskie problemy sovremennoi meditsiny. Moskva, Meditsina, 1965. 277 p. (MIRA 18:6)

1. Akademiya meditsinskikh nauk SSSR, Moscow.

SHVEYKIN, V.V.; STUKACH, A.G.; BYKOV, V.D.

Production of thick-walled titanium pipe blanks. Izv.vys.ucheb.
zav.; tsvet.met. 2 no.6:178-184 '59. (MIRA 13:4)

1. Ural'skiy politekhnicheskiy institut, kafedra obrabotki
metallov davleniyem.
(Titanium) (Deep drawing (Metalwork))

BYLOV, V.D.; ZNAMENSKIY, Yu.D.; KAPITONOVA, L.P.; SHCHEDROV, M.S.

Sulfuric acid method of recovering nitrogen oxides from
incompletely oxidized gases. Zhur.prikl.khim. 35 no.7:1503-
1505 J1 '62. (MIRA 15:8)

(Nitrogen oxide)

BYKOV, V.D., red.; KOSOV, B.F., red.; LAZUKOV, G.I., red.; MARKOV, K.K., red.; RYABCHIKOV, A.M., red.; SAUSHKIN, Yu.G., red.; YANIKOV, G.V., red.; CHERNYKH, M.P., mladshiy red.; MAL'CHEVSKIY, G.N., red.kart; VILENSKAYA, E.N., tekhn.red.

[Methodology of geographical studies] Metody geograficheskikh issledovaniy; sbornik statei. Moskva, Gos.izd-vo geogr.lit-ry, 1960. 388 p. (MIRA 13:12)

1. Moscow. Universitet. 2. Kafedra gidrologii sushi Moskovskogo gosudarstvennogo universiteta (for Bykov). 3. Kafedra geomorfologii Moskovskogo gosudarstvennogo universiteta (for Kosov). 4. Kafedra obshchego zemledeliya Moskovskogo gosudarstvennogo universiteta (for Lazukov, Markov). 5. Kafedra fizicheskoy geografii zarubezhnykh stran Moskovskogo gosudarstvennogo universiteta (for Ryabchikov). (Geography--Study and teaching)

BYKOV, V.D., red.; ZVONKOVA, T.V., red.; GLADKOV, N.A., red.;
KOVALEV, S.A., red.; KOSOV, B.F., red.; MARKOV, K.K.,
red.; RYABCHIKOV, A.M., red.; SAUSHKIN, Yu.G., red.;
SIMONOV, Yu.G., red.; KHRUSHCHEV, A.T., red.;
BOKOVETSKIY, O.D., red.; KONOVALYUK, I.K., mladshiy red.;
GOLITSYN, A.V., red.kart; KOSHELEVA, S.M., tekhn. red.

[Soviet geography during the period of the building of
communism] Sovetskaya geografiya v period stroitel'stva
kommunizma. Moskva, Geografiz, 1963. 486 p.

(MIRA 16:10)

(Geography)

HAHE, PAUL F., ed; FOTEYEVA, M.N., redaktor; BYKOV, V.D. [translator].

[A manual of artificial radioisotope therapy] Terapevticheskoe primeneni
radioaktivnykh isotopov; sbornik statei. Perevod s angliiskogo V.D.Bykova.
Pod red. i s predisl. M.N.Foteevoi. Moskva, Izd-vo inostrannoi lit-ry, 1952.
288 p. (MLRA 6:5)

(Isotopes--Therapeutic use)

BYKOV, V.D., Cand Med Sci—(diss) "Study of age-related and typological peculiarities of the higher nervous ~~system~~ activity ^{of} dogs in ontogenesis." Mos, 1958. 16 pp (Acad Med Sci), 200 copies (II, 30-58, 131)

-134-

ANOKHIN, Petr Kuz'mich; BYKOV, V.D., red.; BUL'DYAYEV, N.A., tekhn.red.

[Internal inhibition as a problem of physiology] Vnutrennee
tormozhenie kak problema fiziologii. Moskva, Gos.izd-vo med.lit-ry
Medgiz, 1958. 470 p. (MIRA 12:11)
(INHIBITION)

EXCERPTA MEDICA Sec 2 Vol 12/9 Physiology Sept 59

4339. CHARACTERISTICS OF THE TYPE OF NERVOUS ACTIVITY ON THE BASIS OF FOOD AND ACID-DEFENSIVE CONDITIONED REFLEXES (Russian text) - Bykov V. D. Inst. of Norm. and Pathol. Physiol., USSR Acad. of Med. Sci., Moscow - BYULL. EKSPER. BIOL. I MED. 1958, 45/9 (34-39) Graphs 2 Tables 1

A parallel determination of the type of higher nervous activity in 2 dogs by 2 different methods was carried out (food secretory motor and acid-defensive). According to the data of the food method one dog appeared to be of a strong, well-balanced and mobile type, while the other was of a strong, excitable type with an average mobility of the nerve processes. Analogous typological characteristics of these animals were also established by the acid-defensive method. Thus, data obtained by the food

BYKOV, V. D.
EXCERPTA MEDICA Sec 2 Vol 12/4 Physiology Apr 59

1353. DEPENDENCE OF EFFECT ON STRENGTH OF STIMULUS IN ACID-
DEFENCE CONDITIONED REFLEXES (Russian text) - Bykov V. D.

Inst. of Norm. and Pathol. Physiol., USSR Acad. of Med. Sci., Moscow

BYULL. EKSPER. BIOL. I MED. 1958, 46/8 (27-31) Graphs 2 Tables 6

The dependence of the value of reflexes on the strength of the stimulus in acid-defence conditioned reflexes is no less pronounced than in food reflexes. The absence of correct dependence of the effect on the strength of the stimulus noted by other authors was due to peculiarities of the methods employed by them. If, in formation of acid reflexes, the acid is poured into the mouth of the animal on one side, while the salivary secretion is registered on the other, the conditioned reflexes show instability and the effect does not depend on the strength of the stimulus. This does not occur if the salivary secretion of the gland is registered on the side of acid introduction.

BYKOV, V.D.

Characteristics of the type of the higher nervous activity based on conditioned food and acid defense reflexes. Biul.eksp.biol. i med. 46 no.9:34-39 S '58 (MIRA 11:11)

1. Iz laboratorii vozrastnoy fiziologii i patologii nervnoy sistemy (zav. - prof. A.A. Volokhov) Instituta normal'noy i patologicheskoy fiziologii (dir. - deystvitel'nyy chlen AMN SSSR V.N. Chernigovskiy) AMN SSSR, Moskva. Predstavlena deystvitel'nyy chlenom AMN SSSR V.N. Chernigovskim.

(REFLEX, CONDITIONED, response

food & acid defense reflexes in determ. higher nerv. activity in dogs (Rus))

NESTURKH, Mikhail Fedorovich; BYKOV, V.D., red.; LYUDKOVSKAYA, N.I.,
tekhn.red.

[Primates and anthropogenesis; monkeys, lemurs, and the
origin of man] Primatologiya i antropogenez; obes'iany, polu-
obes'iany i proiskhozhdenie cheloveka. Moskva, Gos.izd-vo med.
lit-ry Medgiz, 1960. 185 p.

(MIRA 14:2)

(Primates) (Man--Origin)

FADDEYEVA, Vera Konstantinovna; BYKOV, V.D., red.; ROMANOVA, Z.A.,
tekhn. red.

[Methods of the experimental investigation of the higher
nervous function of man; child and adult, the healthy and
the sick] Metodika eksperimental'nogo issledovaniia vys-
shei nervnoi deiatel'nosti cheloveka; rebenka i vzroslogo,
zdorovogo i bol'nogo. Moskva, Medgiz, 1960. 253 p.

(MIRA 15:3)

(CONDITIONED RESPONSE)

LIOZNER, L.D., prof., red.; BYKOV, V.D., red.; LYUDKOVSKAYA, N.I.,
tekh.n.red.

[Regeneration of organs in mammals] Regeneratsiia organov
u mlekopitaiushchikh. Moskva, Gos.izd-vo med.lit-ry, 1960.
391 p. (MIRA 14:4)
(REGENERATION (BIOLOGY))

BYKOV, V.D.

Rate of formation of conditioned reflexes as an indication of
the development of higher nervous activity in ontogenesis.
Zhur. vys. nerv. deiat. 10 no. 1:101-109 Ja-F '60. (MIRA 14:2)

1. Laboratory of Comparative Ontogenesis of the Nervous System,
Institute of Normal and Pathological Physiology, U.S.S.R. Academy
of Medical Sciences, Moscow.

(CONDITIONED RESPONSE) (AGING)

VERBOLOVICH, Petr Alekseyevich; BYKOV, V.D., red.; LYUDKOVSKAYA, N.I.,
tekh. red.

[Myoglobin and its role in the physiology and pathology of
animals and man] Mioglobin i ego rol' v fiziologii i patologii
zhivotnykh i cheloveka. Moskva, Medgiz, 1961. 212 p.

(MIRA 15:7)

(MYOHEMOGLOBIN)

PARIN, V.V., otv. red.; VOLOKHOV, A.A., zam. otv. red.; NIKITINA,
G.M., red.; PILIPENKO, V.I., red.; CHUMAK, V.I., red.;
BYKOV, V.D., red.; LYUDKOVSKAYA, N.I., tekhn. red.

[Problems in the physiology and pathology of the central nervous
system of man and animals in ontogenesis] Voprosy fiziologii
tsentral'noi nervnoi sistemy cheloveka i zhivotnykh v ontogene-
ze; sbornik nauchnykh rabot. Moskva, Medgiz, 1961. 223 p.
(MIRA 15:8)

1. Akademiya meditsinskikh nauk SSSR, Moscow.
(NERVOUS SYSTEM)

BYKOV, V.D.; NIKITINA, G.M.

"Problem of the physiology and pathology of the higher nervous activity." Reviewed by V.D.Bykov, G.M.Nikitina. Zhur.vys.nerv. deiat. 11 no.3:572-575 My-Je '61. (MIRA 14:7)
(NERVOUS SYSTEM) (BYKOV, V.D.) (NIKITINA, G.M.)

FILIPPOVICH, Sof'ya Iosifovna, prof.; BYKOV, V.D., red.; ROMANOVA,
Z.A., tekhn. red.

[Adaptive processes in disorders of the activity of the
digestive system] O prispobitel'nykh protsessakh pri na-
rusheniakh deiatel'nosti pishchevaritel'noi sistemy.

Moskva, Medgiz, 1962. 166 p.

(MIRA 15:10)

(ADAPTATION (BIOLOGY))

(DIGESTIVE ORGANS—DISEASES)

DAVYDOVSKIY, Ippolit Vasil'yevich; BYKOV, V.D., red.; BALDINA, N.F.,
tekhn. red.

[The problem of causality in medicine; etiology] Problema pri-
chinnosti v meditsine; etiologiya. Moskva, Medgiz, 1962. 174 p.
(MIRA 15:10)

(DISEASES—CAUSES AND THEORIES OF CAUSATION)

POLTYREV, Saveliy Solomonovich; BYKOV, V.D., red.; LYUDKOVSKAYA, N.I.,
tekhn.red.

[Problems in the pathogenesis and treatment of some diseases
of the internal organs in the light of experimental data]
Voprosy patogeneza i terapii nekotorykh zabolevanii vnutrennikh
organov v svete eksperimental'nykh dannykh. Moskva, Medgiz,
1962. 210 p. (MIRA 15:4)
(PATHOLOGY, EXPERIMENTAL)

MOSYAGINA, Yelena Nikiforovna; BYKOV, V.D., red.; LYUDKOVSKAYA, N.I.,
tekhn. red.

[Erythrocyte balance under normal and pathological conditions]
Eritrotsitarnoe ravnovesie v norme i patologii. Moskva, Med-
giz, 1962. 271 p. (MIRA 15:8)

(ERYTHROCYTES)

VYAZOV, Oleg Yevgen'yevich; BYKOV, V.D., red.; MIRONOVA, A.M., tekhn.
red.

[Immunology of embryogenesis]Immunologiya embriogeneza. Mo-
skva, Medgiz, 1962. 326 p. (MIRA 15:11)
(EMBRYOLOGY) (IMMUNOLOGY)

USPENSKIY, Vladimir Ivanovich; BYKOV, V.D., red.; MATVEYEVA, M.M.,
tekhn. red.

[Histamine] Gistamin. Moskva, Medgiz, 1963. 214 p.
(MIRA 16:4)

(HISTAMINE)

PAVLENKO, Stefan Makarovich; BYKOV, V.D., red.; BEL'CHIKOVA,
Yu.S., tekhn. red. ~~.....~~

[Natural science fundamentals of medical genetics]
Estestvennonauchnye osnovy meditsinskoj genetiki. Mo-
skva, Medgiz, 1963. 45 p. (MIRA 16:11)
(HEREDITY OF DISEASE)

BOYKO, Yevgeniy Ivanovich; BERNSHTEYN, N.A., prof., retsenzent;
PARIN, V.V., prof., retsenzent; BYKOV, V.D., red.

[Reaction time in man; history, theory, contemporary state
and practical significance of chronometric studies] Vremia
reaktsii cheloveka; istoriia, teoriia, sovremennoe sostoianie
i prakticheskoe znachenie khronometricheskikh issledovaniy.
Moskva, Meditsina, 1964. 439 p. (MIRA 17:6)

1. Chlen-korrespondent AMN SSSR (for Bernshteyn). 2. Dey-
stvitel'nyy chlen-korrespondent AMN SSSR (for Parin).

SUKACHEV, V.N.; BOGDANOV, A.A.; IVANOVA, I.K.; LAZUKOV, G.I.; NIKOLAYEV, N.I.;
YAKUSHOVA, A.F.; GELLER, S.Yu.; GRICHUK, V.P.; KOLESNIK, S.V.;
SOKOLOV, N.N.; LICHKOV, B.L.; GORETSKIY, G.I.; SHCHUKIN, I.S.;
BYKOV, V.D.; SAUSHKIN, Yu.G.; GLAZOVSKAYA, M.A.; GVOZDETSKIY, N.A.;
TUSHINSKIY, G.K.

Konstantin Konstantinovich Markov's role in the creation and development of the paleogeography of the anthropogenic (the Quaternary) period; on his 60th birthday and the 40th anniversary of scientific work. Izv. Vses. geog. ob-va 97 no.4:377-379 JL-Ag '65.
(MIRA 18:8)

BYKOV, Vasil'y Dmitriyevich; VASIL'YEV, Andrey Vasil'yevich;
CHEBOTAREV, A.I., otv. red.; CHEPELKINA, L.A., red.

[Hydrometry] Gidrometriia. Izd.2., perer. i dop. Leningrad, Gidrometeoizdat, 1965. 498 p. (MIRA 19:1)

BYKOV, V.D., doktor geogr. nauk, prof., red.; TATARINOVA, Ye.I.,
red.

[Problems of hydrology] Voprosy gidrologii. Moskva,
Izd-vo Mosk. univ. No.2. 1965. 128 p.
(MIRA 18:8)

1. BYKOV, V. D.
2. USER (600)
4. Moscow River
7. Upper reaches of the Moscow River. Trudy Geog.st. "Krasnovidovo" No. 1 - 1948.

9. Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified.

BYKOV, V. D.

(Hydrometry) Leningrad, Gidrometeorologicheskoe izd-vo, 1949. 462 p.
(50-39652)

TC177.B9

Bykov, V. D.

54-203
 Bykov, V. D., Istoricheskie puti razvitiya v SSSR ucheniya o stoka. [History of the development of runoff studies in the U.S.S.R.] Voprosy Geografii, Moscow, No. 38/19-34, 1981. refa., bibliog. p. 33-34. DLC—Concise literature survey presenting a list of 53 basic Russian papers on runoff and related subjects. Topics covered: Hydrographic and hydrological surveys, runoff and river load data, maximum flood runoff, climatic and topographic influences, classification, evapotranspiration from large areas, theory of hydrologic cycle, etc. Two papers of S. D. MURAVITSKI (born 1894, died 1950) discussed in detail (theory of runoff from the geographical point of view). Subject Headings: 1. Runoff/research 2. Hydrologic cycle 3. U.S.S.R. 4. Muravitski, S. D. A.A.

551.579

KE

CHEBOTAREV, Nikolay Petrovich. Prinimali uchastiye: BLIZNYAK, Ye.V.,
doktor tekhn. nauk, prof., retsenzent [deceased]; APOLLOV,
B.A., doktor tekhn. nauk, prof., retsenzent; BEFANI, A.N.,
doktor tekhn. nauk, prof., retsenzent; BYKOV, V.D., kand.
tekhn. nauk, retsenzent; KALININ, G.N., red.; BELYAKOVA, Ye.V.,
red.; GEORGIYEVA, G.I., tekhn. red.

[Study of runoff] Uchenie o stoke. Moskva, Izd-vo Mosk. univ.,
1962. 405 p. (MIRA 15:8)

(Runoff)

BYKOV, Vasilii Dmitriyevich; TATARINOVA, Ye.I., red.; YERMAKOV, M.S.,
tekhn. red.

[Runoff of Ural rivers; geographic and hydrologic regularities
in the distribution and runoff regime of rivers in the Urals]
Stok rek Urala; geografo-gidrologicheskie zakonomernosti ras-
predeleniia i rezhima stoka rek na territorii Urala. Moskva,
Izd-vo Mosk. univ., 1963. 142 p. (MIRA 16:3)
(Ural Mountain region--Runoff)

BYKOV, V.F., kand.istor.nauk

V.I. Lenin and the turn toward Marxism in progressive medical
thinking in Russia in the nineties. Vest.AMH SSSR 14 no.6:
3-12 '59. (MIRA 13:6)

(LENIN, VLADIMIR IL'ICH, 1870-1924)

BYKOV, V.F., kand.isotoricheskikh nauk (Moskva)

V.I. Lenin and Russian social medicine at the end of the 19th
century. Sov. zdrav. 19 no. 4:5-10 '60. (MIRA 13:10)
(PUBLIC HEALTH)

BYKOV, V.F., kand.istoricheskikh nauk

V.I.Lenin and the first Marxist physicians. Vest.AMN SSSR 15 no.6:
3-15 '60. (MIRA 14:4)
(LENIN, VLADIMIR IL'ICH, 1870-1924) (PHYSICIANS)

BYKOV, V.I. - LUK'YANOVICH, V.M. -- RADUSHKEVICH, L.V.

Far East - Sorbents

†
Natural sorbents of the Far East. Part 1 study of natural sorbents with the aid of an electron microscope. Izv. AN SSSR Otd. khim, nauk. no. 3, 1952.

Monthly List of Russian Accessions, Library of Congress. November 1952. UNCLASSIFIED.

BYKOV, V.I.
BYKOV, V.I.

Experience operating a hydroelectric development. Izv.mar.sta.
po elek.sel.i les.khoz. no.2:47-50 '53. (MIRA 10:12)
(Mordovshchikovo—Hydroelectric power station)

BYKOV, V.I.

Production of twin glass ampules on semiautomatic machines. Med. prom.
11 no.3:49-53 Mr '57 (MLRA 10:4)

1. Iz opyta raboty Chelyabinskogo khimiko-farmatsevticheskogo
zavoda.

(GLASS MANUFACTURE)

BYKOV, V. I.

KARGIN, V. A.

5(3) p.4

PHASE I BOOK EXPLOITATION

SOV/1589

Akademika nauk SSSR.

Khimiya bol'shikh molekul; sbornik statei (Chemistry of Large Molecules). Collection of Articles) Moscow, Izd-vo AN SSSR, 1958. 299 p. (Series: Akademika nauk SSSR. Nauchno-populyarnaya seriya) 30,000 copies printed.

Compiler: G.V. Sklovskiy; Resp. Ed.: A.V. Topchiyev, Academician; Ed. of Publishing House: V.A. Boyarskiy; Tech. Ed.: I.M. Guseva.

REMARKS: This book is intended for a wide circle of readers including those who have had no training in chemistry. It can also serve as a manual for propagandists, teachers, and journalists.

Chemistry of Large Molecules (Cont.)

SOV/1589

COVERAGE: This collection of articles reflects the trend for the future development of the Soviet chemical industry as indicated by the May plenary session of the Central Committee of the Communist Party within the framework of the new Seven Year Plan. These articles were published in newspapers and journals. The authors, scientists and industry workers, developed the theme of accelerated development of the chemical industries, and sciences, with stress on the manufacture of synthetic fibers, plastics, and other materials. Some of the articles were abridged, revised, or enlarged. The articles were selected to give an adequate survey of the chemistry and technology of high polymers, plastics, and their use in industry, agriculture, and the household. The articles concern consumers' goods. Mentioned are raw materials for the production of polymers. This book belongs to the popular-science series of the Academy of Sciences. Similar volumes are intended for future publication. No references are given.

TABLE OF CONTENTS:

Preface

Chemistry of Large Molecules (Cont.)	SOV/1589
Vorobitsov, M.M. Give Wider Scope to Research	255
Medvedev, A.L. Prospects for the Development of the Chemistry of Synthetics in Armenia	257
Eyurisp, A.A. Develop the Chemistry of Shales	262
Pavlyuchenko, M.M. The Task Which Awaits You	265
Rakovskiy, V.Ye. Utilization of Peat in Chemistry	269
Zashkvara, V. G., M. Litvinenko, S. Aronov, and P. Sekt. One More Source of Chemical Raw Materials	272
Besmanov, Kh. U. Wonders of the Macromolecule	275
Bykov, V. I. and Ye. Orlov. Prospects for the Development of the Chemical Industry in the Far East	280
Card 7/8	

BYKOV, V.I., inzh.

Thermomechanical continuous lime-slaking machine designed by
Rusol and Poliakov. Stroi. i dor. mashinostr. 4 no.11:19
N '59 (MIRA 13:3)

(Lime)

ZAYTSEV, R.V., inzh.; SIBIRKO, A.M., inzh.; BYKOV, V.I., inzh.

Using electronic calculating machines in computing the quantities
of earthwork. Transp. stroi. 11 no.1:61 Ja '61. (MIRA 14:1)
(Electronic calculating machines) (Earthwork—Accounting)

BYKOV, V.I., kand.tekhn.nauk (Novosibirsk)

"Refrigerated railroad transportation" by S.F.Matalasov.

Reviewed by V.I. Bykov. Zhel.dor.transp. 44 no.1:93-94

Ja '62.

(MIRA 14:12)

(Refrigerator cars)

(Matalasov, S.F.)

LYAKHOVSKIY, V.N., kand.tekhn.nauk; MIKHALEVICH, V.S., kand.fiz.-matem.nauk;
BYKOV, V.I., inzh.; ZAYTSEV, R.V., inzh.; SIBIRKO, A.N., inzh.;
SHOR, N.Z., inzh.

Determination on an electronic digital computer of the most
advantageous location of a red line of longitudinal section
which may move freely. Transp. stroi. 12 no.4:41-43 Ap
'62. (MIRA 15:5)

(Electronic digital computers) (Railroads--Location)

BEGAGOVEN, I.A., dotsent, kand.tekhn.nauk; BYKOV, V.I., inzh.

Standard device for measuring the hardness of internal
hardened and unhardened surfaces of cylinders. Sbor.nauch.
trud. KGBI no. 21:179-183 '63. (MIRA 17:7)

Bykov, V. I.

112-2-4712D

TRANSLATION FROM: Referativnyy zhurnal, Elektrotehnika, 1957,
Nr 2, p. 319 (USSR)

AUTHOR: Bykov, V.I.

TITLE: The Design of an Efficient, Automatic Radio Direction
Finder System for Ocean Going Vessels of the Merchant
Marine (O vybore ratsional'noy sistemy avtomaticheskikh
radiopelengatorov dlya sudov morskogo trgovogo flota)

ABSTRACT: Bibliographic entry on the author's dissertation for the
degree of Candidate of Technical Sciences, presented to the
Leningrad Higher Marine Engineering College (Leningr. vyssh.
inzh.-mor. uch-shche), Leningrad, 1956.

ASSOCIATION: Leningrad Higher Marine Engineering College (Leningr.
vyssh. inzh.-mor. uch-shche)

card 1/1

BYKOV, V. I.

BYKOV, V., kandidat tekhnicheskikh nauk.

Effect of antennalike secondary emitters on the deviation of radar bearings from the tracking system. Mor.flot 17 no.6:23 Je '57.

(MIRA 10:7)

1. Arkticheskiy nauchno-issledovatel'skiy institut.
(Radar in navigation)

~~BYKOV, Vladimir Ivanovich, kand. tekhn. nauk; NIKITENKO, Yuriy Ivanovich,~~
~~doklady, kand. tekhn. nauk; MATSYUTO, A.F., retsenzent; SEMIKOV, T.T.,~~
~~red.; KHACHATUROV, V.V., red.; LAVRENOVA, N.B., tekhn. red.~~

[Phase radio navigation system, Decca-Navigator] Fazovaia radionavi-
gatsionnaia sistema "Decca-Navigator." Moskva, Izd-vo "Morskoi tran-
sport," 1961. 150 p. (MIRA 14:8)

1. Glavnyy shturman Baltiyskogo gosudarstvennogo morskogo parokhod-
stva (for Matsyuto)
(Decca navigation)

S/194/62/000/006/195/232
D295/D308

13.2300

AUTHOR: Bykov, V.I.

TITLE: The navigation of craft along zero isophase lines by means of two-channel CR-display radio-direction finders

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 6, 1962, abstract 6-7-123 ya (Inform. sb. tsentr. n.-i. in-t morsk. flota, no. 60, 1961, 13-17)

TEXT: The use on ships of two-channel radio direction finders with cathode-ray-tube display enables ships to be piloted with a high degree of accuracy along zero isophase lines of beacons whose aerials produce a multi-lobe radiation pattern. If a radio beacon with separated aerials radiates synchronized oscillations of the same frequency, then a ship can be piloted along an assigned course, observed visually in the form of a straight line on the screen of an indicator. Theoretical calculations of pilotage accuracy are given. 1 figure. [Abstracter's note: Complete translation.]

Card 1/1

S/194/62/000/006/196/232
D295/D308

AUTHOR: Bykov, V.I.

TITLE: A new trend in the development of phase-type radio-navigation systems

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 6, 1962, abstract 6-7-124 shch (Inform. sb. Tsentr. n.-i. in-t morsk. flota, no. 66, 1961, 3-9)

TEXT: A comparison is given of classical post-war phase-type (hyperbolic) radio-navigation systems, such as 'Decca' and 'Co-ordinator', with their relatively new versions, 'Dectra', 'Omega' and others, using time separation of signals. The advantage of time separation over frequency separation are pointed out: increased noise immunity, reduction of errors connected with features of radio-wave propagation and with phase shifts in the receiver. On the other hand, in the systems 'Dectra', 'Omega' and others the receiver-indicator unit is more complex, and its operation must be synchronized with that of shore radio stations. 4 figures. [Abstracter's note: Complete translation.]

Card 1/1

13,2100

S/194/62/000/010/064/084
A061/A126

AUTHOR: Bykov, V.I.

TITLE: Elimination of the "night effect" influence on radio direction finding

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 10, 1962, 64, abstract 10-7-128a (Inform. sb. Tsentr. n.-i. in-t morsk. flota, 1961, no. 70, 9 - 14)

TEXT: The "night effect" influence on the accuracy of determining the direction to a radio station is considered. A 2-channel visual radio direction finder with electron-beam indicator is recommended for eliminating similar errors. Its technical data are given with instructions for use under "night effect" conditions. There are 4 figures. VB

V.Sh.

[Abstracter's note: Complete translation]

Card 1/1

BYKOV, Vladimir Ivanovich; KUKLIN, Yuriy Ivanovich; NIKITENKO,
Yuriy Ivanovich; CHERNYAYEV, R.N., kand. tekhn. nauk, re-
tsenent; SEMIKOV, T.T., kand. tekhn. nauk, red.; FRISHMAN,
Z.S., red. izd-va; KOTLYAKOVA, O.I., tekhn. red.

[Visual radio direction finder on ships] Sudovye vizual'nye
radiopelengatory. Leningrad, Izd-vo "Morskoi transport,"
1962. 104 p. (MIRA 15:7)

(Radio direction finders)

BYKOV, V.I., kand.tekhn.nauk

Ship sailing on zero-isophase lines with the help of two-
channel visual radio direction finders. Inform.sbor.TSNIIMF
no.60 Sudovozh.i svias' no.15:13-17 '61. (MIRA 16:2)
(Radio direction finders)

BYKOV, V.I., kand.tekhn.nauk

New trends in the development of phase radio navigation systems.
Inform.sbor.TSNIIM no.66 Sudovozh.i svyaz' no.7:3-9 '61.
(Decca navigation) (MIRA 16:2)

VERSHKOV, Marat Vladimirovich; BYKOV, V.I., nauchnyy red.;
FRISHMAN, Z.S., red. izd-va; KOTLYAKOVA, O.I., tekhn.red.

[Calculation and design of marine radiocommunication antennas] Raschet i proektirovanie sudovykh antenn radiosvazi.
Leningrad, Izd-vo "Morskoi transport," 1963. 144 p.
(MIRA 16:6)

(Radio--Installation on ships) (Radio--Antennas)

BIKOV, V.I., kand.tekhn.nauk; PRAVDYUK, V.V., kand.voyenno-morskikh nauk

Use of radio navigation systems (RNS) for navigation on approaches
to harbors, on canals and in narrows. Trudy TSNIIMF 8 no.47:
3-15 '63. (MIRA 16:12)

BYKOV, V.I., dotsent, kand.tekhn.nauk

Calculating the capacity of ice supply points. Trudy NII ZHT
no.33:17-28 '63. (MIRA 17:3)

BYKOV, Vladimir Ivanovich. Prinimal uchastiye PRAVDYUK, V.V.,
st. nauchn. sotr.

[The Loran pulse-type radio navigation system] Impul's-
naia radionavigatsionnnaia sistema "Loran." Moskva, Izd-
vo "Transport," 1964. 131 p. (MIRA 17:5)

1. TSentral'nyy nauchno-issledovatel'skiy institut morskogo
flota (for Pravdyuk).

BYKOV, V.I., kand. tekhn. nauk

Using pulse position modulation radio navigation systems for
correct time readings. Inform. sbor. TSNIIMF no.102 Sudovozh.
i sviaz' no.24:19-23 '63. (MIRA 17:9)

L 3999-66 EWT(d) RB/BC
ACCESSION NR: AR5008083

S/0274/65/000/001/B044/B045
621.396.983.31

SOURCE: Ref. zh. Radiotekhnika i elektrosvyaz'. Svodnyy tom, Abs. 1B267 ³⁰ _B

AUTHOR: Bykov, V. I. ⁴⁴

TITLE: Making the ambiguity elimination more reliable in a "Decca-Navigator" system operating with long ranges

CITED SOURCE: Inform. sb. Tsentr. n.-i. in-t morsk. flota, vyp. 115, 1964, 42-55 ⁴⁴

TOPIC TAGS: radionavigation / Decca Navigator system ⁴⁴

TRANSLATION: Eliminating the reading ambiguity, in the ship position finding from a hyperbolic lattice in the "Decca-Navigator" system, is a fundamental problem when longer ranges of operation are involved. A permissible ratio E_{rj}/E_s shows the value at which the error in determining the position line from a hyperbolic lattice does not exceed one-half of the exact path (here, E_{rj} is the resulting field phase and E_s is the surface-wave phase); with a maximum of

Card 1/2

L 3999-66

ACCESSION NR: AR5008083

0.44, the range of the position finding is about 445 km. An uncertain elimination of the ambiguity of exact isoline lattice during the dark time of the day and a low noise immunity are fundamental shortcomings of the existing system responders. These shortcomings have been eliminated in the new M-12 model of the responder. The permissible ratio $E_{\text{ref}}/E_s = 0.67$, which considerably increases the range (up to 550-650 km). In addition, the noise immunity of the position-line deccometer has been enhanced by using a local AFC heterodyne with a phase adjustment to the master station. Bibl. 1, figs. 7, tabs. 4.

SUB CODE: NG

ENCL: 00

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L 27049-66 EWT(a) BC

ACC NR: AT6005745

(N)

SOURCE CODE: UR/2914/64/000/115/0042/0055

AUTHOR: Bykov, V.I. (Candidate of Technical Sciences)

ORG: None

TITLE: Improved reliability of the elimination of ambiguity in the RNS "Dekka-navigator" at large distances

SOURCE: Leningrad. Tsentral'nyy nauchno-issledovatel'skiy institut morskogo flota. Informatsionnyy sbornik, no. 115, 1964. Sudovozhdeniye i svyaz' (Navigation and communications), no. 26, 42-55

TOPIC TAGS: navigation system, radio guidance, ship navigation, radar navigation

ABSTRACT: This paper is concerned with hyperbolic radio navigation, more specifically - with the improvement of reliability in attaining its maximum precision under adverse conditions. The theory and techniques for a reliable elimination of multiple ambiguities inherent in the position determination at night with the RNS "Dekka-navigator" shipboard monitor are described. This equipment is the shipboard subsystem of the "Dekka", a ground-based, phase-shift-principle hyperbolic low frequency radio navigation system. Dekka is widely used in Europe and has also transmitter chains in Canada, on

Card 1/2

UDC: 621.396.932.1

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the Persian Gulf and in India. The advantages of the system (extreme precision under favorable conditions) are often degraded at night by the interference of space (ionospheric) reflected signals of a spurious character, due mainly to the time-dependence of the ionospheric parameters at night. The result is phase instability of the electric field at the receiver, leading to impaired precision. At reasonably small ratios of spurious-to-direct signal energies, the present techniques of precision enhancement are effective. They consist of timed, cyclic radiations of integer harmonics of the base frequency by the master and the three slave stations of a Dekka ground installation. However, this method increases precision at the expense of multiple answers with multiple ambiguity (e.g. a sixfold one). Methods for the elimination of this ambiguity are described, and illustrated, with particular reference to the shipboard "Dekka-navigators" MV-5, MV-10 and MV-12. Estimates of the practically attainable night navigational precision, and the useable distances from the Dekka ground station for precise night navigation are given. Precision of navigation decreases with the distance. Advice on optimum use of the equipments is presented. Orig.art. has: 7 figures, 1 formula and 4 tables.

SUB CODE: 17

SUBM DATE: 00

ORIG REF: 001

OTH REF: 000

Card 2/2

BYKOV, V.I., kand. tekhn. nauk; SAYFULLIN, B.I., kand. voyenno-morsk. nauk

Using short-range radio navigation stations for high precision
operations. Inform. sbor. TSNIMF no.115. Sudovosh. i sviaz'
no.26:84-94 '64. (MIRA 18:2)

ACC NR: AR6034816 (N) SOURCE CODE: UR/0398/66/000/008/V017/V017

AUTHOR: Bykov, V. I.

TITLE: Practical data on the dependability of elimination of multivalent readings in the "Dekka" radar system

SOURCE: Ref. zh. Vodnyy transport, Abs. 8V111

REF SOURCE: Inform. sb. Tsentr. n. -i. in-t morsk. flota, no. 31(14), 1965, 24-30

TOPIC TAGS: navigation radar, shipborne radar/MK VII "Dekka" radar navigation system, "Dekka" radar navigation system, "MK V" receiver indicator

ABSTRACT: The dependability of the elimination of multivalence in readings, i. e. the dependability of the identification of the track number of fine isoline grids at any time of the day, differs with each grid step. It depends substantially on the conjugation coefficient of fine and coarse grids and is determined by a path identification diagram used in one or another receiver indicator. In the "Dekka" radar navigation system, multivalence is eliminated by two steps in which the various

Card 1/2

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ACC NR: AR6034816

values of the conjugation coefficient are used. Taking into consideration the given values y_i and y_{ii} and using the mean square = $\varphi(R)$ graph, it is possible to determine with a 95% probability the distance to a "Dekka" radar navigation station, at which it is possible to use tracks in both steps, thus eliminating multivalence. Dependability of the elimination of multivalence in readings for MK-V receiver-indicators and Mk-VII "Dekka" radar navigation systems was determined experimentally during trips in the operation areas of 1B/MP, 3B/MP, 4B/MP, 5B/MP, 6C/V, 7B/MP, 8B/MP and 9B/V. Orig. art. has: 6 figures and 1 table. [Translation of abstract] [GC]

SUB CODE: 17, 13/

Card 2/2

BYKOV, V. Kh.

BYKOV, V. Kh. - "Increasing the Tractive Force of a Locomotive through Cohesion."
Min Railroads USSR. Leningrad Order of Lenin Inst of Railroad Transport
Engineers imeni Academician V. N. Obratsov. Leningrad, 1955. (Dissertation
for the Degree of Candidate in Technical Sciences)

So; Knizhnaya Letopis' No 3, 1956